

ATTY DOCKET NO.  
134557

DOC. ID  
134557A

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**Claim Rejections - 35 USC §102**

2. The Examiner's rejection of Claims 1 and 13 under 35 U.S.C. 102(b) as being anticipated by Unternahrer (US Patent No. 6,021,154) has been carefully studied and the Applicants respectfully disagree with the Examiner's reasons for the rejection. The Applicants respectfully submit that the Unternahrer reference fails to teach and, thus, anticipate all the elements of the rejected Claims. The Unternahrer reference fails to teach an anti-feedback means for preventing electromagnetic radiation reflections from the target area from entering the laser unit during laser shock peening wherein the anti-feedback means is located between the laser unit and a final focusing lens as claimed in the rejected Claims 1 and 13. The Unternahrer patent does not disclose any anti-feedback means for preventing electromagnetic radiation reflections from the target area from entering the laser unit during laser shock peening. The polarizer in Unternahrer is contained within the laser unit and not between the laser unit and the laser shock peening surface as in the rejected Claim. Furthermore, there is nothing disclosed in Unternahrer that would lead one skilled in the art to believe that the polarizer in Unternahrer is or functions as an anti-feedback means for preventing electromagnetic radiation reflections from the target area from entering the laser unit during laser shock peening. The polarizer in Unternahrer is located after the amplifier 36 which clearly teaches away from the invention of the Claims in the present invention. The Examiner has

ATTY DOCKET NO.  
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failed to point out anything in Unternahrer that functions as an anti-feedback means for preventing electromagnetic radiation reflections from the target area from entering the laser unit during laser shock peening and Unternahrer does not disclose that anything in the patent provides anti-feedback for preventing electromagnetic radiation reflections from the target area from entering the laser unit during laser shock peening.

The Applicants respectfully submit that the remarks above clearly proves that there is an absence of features of the presently claimed invention in the Unternahrer patent and that the cited reference does not teach or disclose an anti-feedback means for preventing electromagnetic radiation reflections from the target area from entering the laser unit during laser shock peening wherein the anti-feedback means is located between the laser unit and a final focusing lens as claimed in the rejected Claims 1 and 13. The Applicants respectfully submit that the Examiner's rejection of Claims 1-13 under 35 U.S.C. 102(b) has been overcome by the remarks above and that Claims 1-19 are in condition for allowance.

Claim Rejections - 35 USC §103(a)

3. The Examiner's rejection of Claims 2-12 and 14-19 under 35 U.S.C. 103(a) as being unpatentable over Unternahrer, as applied to the rejection of Claims 1 and 13 and further in view of Hackel et al. (US Patent No. 6,198,069) has been studied and the Applicants respectfully disagree with the Examiner's reasons for the 103 rejection because the Unternahrer and Hackel patents fail to teach or disclose all the elements of the rejected Claims as clearly shown in the remarks above with regards to the 102 rejection. The

ATTY DOCKET NO.  
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DOC. ID  
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Unternahrer and Hackel patents fail to teach or even suggest an anti-feedback means for preventing electromagnetic radiation reflections from the target area from entering the laser unit during laser shock peening wherein the anti-feedback means is located between the laser unit and a final focusing lens as claimed in the rejected Claims 1 and 13 and the respective dependent Claims 2-12 and 14-19 rejected by the Examiner under 103(a).

The Applicants respectfully submit that the remarks above clearly proves that there is an absence of features of the presently claimed invention in the Unternahrer patent and that the cited reference does not teach or disclose an anti-feedback means for preventing electromagnetic radiation reflections from the target area from entering the laser unit during laser shock peening wherein the anti-feedback means is located between the laser unit and a final focusing lens as claimed in the rejected Claims 1 and 13.

The Examiner states that Unternahrer teaches a shock peening system but does not specifically disclose the use of an isolator or faraday isolator and that Hackel discloses a laser shock system that uses polarizers, isolators, rotators, a Pockel cell or a faraday rotator. The Examiner contends that "It would have been obvious to one of ordinary skill in the art at the time of the invention to use an isolator or faraday rotator as taught by Hackel et al. in the Unternahrer laser shock peening system because these are merely variations of a functionally equivalent device." However, the Examiner has failed to state what the isolator or faraday rotator as taught by Hackel et al. is functionally equivalent to in the Unternahrer laser shock peening system. Furthermore, as clearly proven above, there is no showing by the Examiner that

ATTY DOCKET NO.  
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DOC. ID  
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either reference taken alone or both in combination teach or suggest an anti-feedback means for preventing electromagnetic radiation reflections from the target area from entering the laser unit during laser shock peening wherein the anti-feedback means is located between the laser unit and a final focusing lens as claimed in the rejected Claims. Certainly, nothing can be found in these two references that indicate either of the laser systems have that capability nor are their elements arranged in a fashion as taught by the present Claims to be able to do so.

Therefore, the Applicants respectfully submit that the Examiner's rejection of Claims 2-12 and 14-19 under 35 U.S.C. 103(a) as being unpatentable over Unternahrer, as applied to the rejection of Claims 1 and 13, and further in view of Hackel et al. (US Patent No. 6,198,069) has been overcome by the remarks above and that Claims 1-19 are in condition for allowance and requests that they be passed on to issue.

Respectfully submitted,

  
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